Criteria for Fund Managers to consider when selecting an OTC derivatives CCP

Part 1 - Margin management

Though there are differences in the margin requirements of the various CCPs in Europe, Walsh argues unequivocally against selecting the CCP with the lowest initial margin requirements. One influence over the level of initial margin is the length of the close-out period. Both Dodd Frank and EMIR stipulate that CCPs have five days to close out transactions in an event of default. In the United Kingdom, the Bank of England permits an even longer period of seven days, chiefly to give end-users an extra two days to port their positions to a new clearing member.

However understandable the intent, this obviously imposes on the CCPs two days' additional risk. In practice, the longer the close-out period, the higher the initial margin required. After all, initial margin is collected to cover potential losses if a CCP has to liquidate the positions of a member, so its size and value is determined by estimating how much might be lost in that liquidation - and that in turn depends on how long it will take to liquidate the position. "The market can move much more in five days than it can in one day," explains Phil Simons. "If it is going to take us five days to liquidate a position, then obviously the amount of initial margin we have to call for must be bigger."

The liquidity of the instrument that must be liquidated is the other factor which influences the time taken to resolve a position. "It is much easier to liquidate a large position in Bund futures than a position in 30 year Swiss franc IRS," says Phil Simons. "So a CCP has to look at the depth of the market, the size of the bid-offer spread, the size of the order that can be done at that spread, and the volatility in the market. The more volatile a market, the more likely a CCP is to call for more initial margin, even if the position is the same size as that of a less volatile market. All of these factors have to be taken into consideration when calculating initial margin."
Jaki Walsh points out that these external factors can multiply the size of the margin calls a fund manager must meet. These can in turn have a substantial impact on the cost of maintaining a position. "Fund managers tend to think they need to supply 'x' amount of margin to collateralize a swap, without realizing how that amount can multiply up," explains Walsh. "In a CCP, if there is a concentration of liquidity in terms of currency or maturity, the multiplier for that type of currency or maturity can tick up."

The way in which the multipliers work varies between CCPs. "Each CCP is different," says Walsh. "There are some that will look at the notional amount of exposure in your account and apply a higher multiple when you hit a certain amount of notional exposure. There are other CCPs which will look at the margin level that is being posted against your portfolio by asset class, and increase the multiple steadily as particular thresholds are passed. Then there are the CCPs, such as Eurex Clearing, that have a more dynamic model. They look at position size versus the market capacity and liquidity in the collateral posted, which is measured by daily traded volumes, spreads and price volatility."

Phil Simons underlines the importance of understanding how CCPs manage concentration risk. “It is one of the biggest fear factors for any CCP,” he says. “Concentration risk is incredibly dangerous, whether it is caused by the concentration of clearing business with two or three or five huge clearing members, or whether everybody is posting the same security. If a major clearing member fails, liquidating a narrow range of securities in a stressed market means that the price of those securities is going to go down.” This is especially true of sovereign debt securities when a country gets into financial difficulty. It is why CCPs actually prefer to diversify their risk by accepting a relatively wide range of securities, provided they are creditworthy, liquid and price-transparent.

This diversification of risk has a direct impact on the so-called “C factor,” a hypothetical capital calculation that CCPs have to publish to their members. The "C factor" is based on an assessment of how much capital the CCP would have to hold to cover its exposures to all of its clearing members and their clients as it would be transacting business with them on a bi-lateral basis.

Inevitably, the calculation of the capital required of each clearing member is complicated. It is derived from a combination of the Basel III leverage ratio and the gross value of the positions intermediated by the CCP, net of margin posted as both initial margin and default fund contribution. Adjustments are also made to take account of the account structure in which the collateral is held at the CCP, with heavier weightings attached to assets held in omnibus rather than segregated accounts.

From 1 January 2017, clearing members will have to make use of these complex C factor methodologies to calculate how much capital they should allocate to their business with each CCP their clients use. The calculations may be complex, but the material point is not. It is this: the lower the C factor posted by a CCP, the lower the capital that a clearing member has to allocate to its relationship with that CCP.

"The lower your C factor is as a CCP, the more balanced and diverse your portfolio of clearing members is, and the more appropriate your margins are," explains Phil Simons. "Ideally, risk is spread evenly across your membership. If you have got 100 members rather than ten members, you have got 99 other members to mutualize the risk with if one member defaults. Equally, a CCP should have a good balance of products, so it is not concentrated in one particular asset class, and has natural hedges against any difficulties which arise in that asset class. Diversification of clearing member and asset class risk is crucial for a CCP. If a CCP has also got the right margin levels, and the right amount of default fund, then the amount of capital the CCP needs is much lower. Therefore the C factor impact on clearing members is much lower."

*A Tabb Group study in June 2014 found 50.5 per cent of the global OTC derivative clearing market was controlled by just 13 clearing members. The number of clearing members reporting to the Commodity Futures Trading Commission (CFTC) fell from 174 in 2002 to 75 at the end of 2014.

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